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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/112,777	07/10/1998	KIA SILVERBROOK	ART24-US	7299
7590	02/24/2004		EXAMINER	GOOD JOHNSON, MOTILEWA
KIA SILVERBROOK SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN NSW, 2041 AUSTRALIA			ART UNIT	PAPER NUMBER
			2672	23
DATE MAILED: 02/24/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/112,777	SILVERBROOK ET AL.	
	Examiner	Art Unit	
	Motilewa A. Good-Johnson	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12 November 2003.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4 and 7 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4 and 7 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

1. This action is responsive to communications: application, filed on 07/10/1998; Amendment A, filed on 10/30/2000; Preliminary Amendment B, filed on 07/11/2001; Amendment C, filed 08/07/2002; Amendment D, filed 11/12/2003.

This action is made final.

2. Claims 1-4 and 7 are pending in the case. Claim 1 is an independent claim.
3. The present title of the application is "Producing Automatic *Painting* Effects in Images" (as originally filed).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogniewicz, *Skeleton-Space: a Multiscale Shape Description Combining Region and Boundary Information*, IEEE, 1994, pages 746-751, further in view of Litwinowicz, *Processing Images and Video for an Impressionist Effect*, SIGGRAPH, 1997.

As per independent claim 1, a method of automatically processing an image comprising the steps of: locating within the image, features having a high spatial variance by: thresholding and skeletonizing the image to produce an image comprising

single pixel width definition of features; (Ogniewicz discloses skeletonization or thinning to reduce a shape into a one-dimensional structure, page 746, col. 1, and further discloses a threshold value, page 749, col. 1); discarding features of the produced image having a size less than a predetermined size; (Ogniewicz discloses a threshold value and removing features below pixel size, page 749, col. 1)

However, it is noted that Ogniewicz fails to disclose fitting curves to the remaining features; and stroking the image with a series of brush strokes emanating from remaining features of the produced image in accordance with the fitted curves.

Litwinowicz discloses brush strokes over an image to produce an impressionist style, page 1, col. 2, and discloses the brush stroke is given a length, radius and orientation and a circle is drawn for the brush radius for the image of a particular stroke and allows a user the option of not drawing the brush strokes in a constant orientation, so that the strokes drawn are not in the same direction, page 4.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the skeleton generated image of Ogniewicz painting the image with the brush stroke simulation of Litwinowicz to allow a user to create/recreate various artistic painting to simulate custom artwork and also to allow curve brush strokes orientations to allow a user the option of the brush stroke direction of the strokes drawn.

With respect to dependent claim 2, . . . brush strokes have decreasing sizes near important features of the image.

However, it is noted that Ogniewicz fails to disclose brush strokes.

Litwinowicz discloses clipped brush strokes in edges to maintain silhouettes and details, page 6, col. 3, line 4-14.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the skeleton generated image of Ogniewicz painting the image with the brush stroke simulation of Litwinowicz so that a user may create/recreate various artistic paintings to simulate custom artwork.

With respect to dependent claim 3, . . . brush strokes include opacity and bump maps for added realism. Litwinowicz discloses rendering brush strokes with texture, page 4, col. 1.

With respect to dependent claim 4, . . . the position of a predetermined portion of brush strokes undergoes random jittering. Litwinowicz discloses random variations, page 2, col. 2.

With respect to dependent claim 7, . . . discarding located features having a size of less than 20 contiguous pixels. Ogniewicz discloses organizing according to structural importance, criteria for judging the skeleton significance at each scale, and further discloses regularization parameters, page 746, col. 2.

Response to Arguments

6. Applicant's arguments with respect to claims 1-4 and 7 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Motilewa A. Good-Johnson whose telephone number is (703) 305-3939. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on (703) 305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Motilewa A. Good-Johnson
Examiner
Art Unit 2672

mgj



JEFFREY A. BRINER
PRIMARY EXAMINER